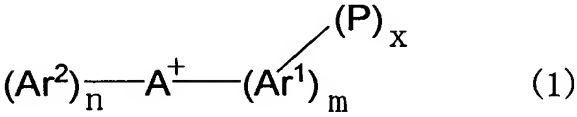
What is claimed is:

1. An onium salt compound having a cation moiety of the following formula (1),



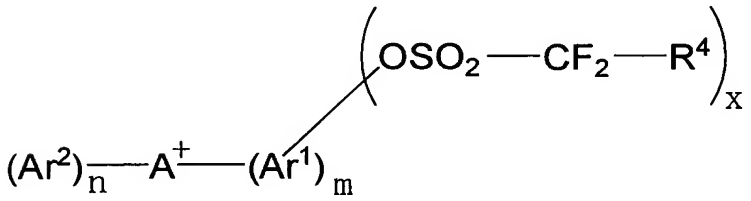
(1)

wherein A represents an iodine atom or a sulfur atom, when A is an iodine atom, m is 1 or 2 and n is 0 or 1, provided that (m+n) = 2, and x is an integer of 1-10, and when A is a sulfur atom, m is 1-3 and n is 0-2, provided that (m+n) = 3, and x is an integer of 1-15; Ar^1 represents a substituted or unsubstituted aromatic hydrocarbon group having 6-20 carbon atoms with a valence of 1 to (x+1) or a substituted or unsubstituted heterocyclic group having 3-20 atoms with a valence of 1 to (x+1), Ar^2 represents a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or Ar^1 and Ar^2 mutually bond together with A^+ in the formula to form a group possessing a cyclic structure with 3-8 atoms; and the x-number of P groups bonding to one or more of the m-number of Ar^1 groups individually represent $-O-SO_2R^1$, $-O-S(O)R^2$, or $-SO_2R^3$, wherein R^1, R^2, and R^3 individually represent a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20

carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R')_2$, wherein R' individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or two R' groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms.

2. The onium salt compound according to claim 1, wherein A in formula (1) is a sulfur atom.

3. The onium salt compound according to claim 1, wherein P in formula (1) is $-O-SO_2-CF_2-R^4$ and the cationic moiety has the in formula (2),



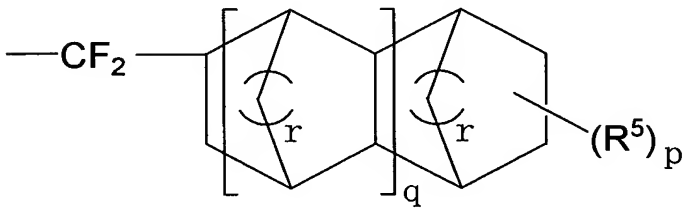
(2)

wherein A, Ar^1, m, Ar^2 ,n, and x are respectively the same as

A, Ar^1, m, Ar^2 ,n, and x in the formula (1) and R^4 represents a hydrogen atom, fluorine atom, nitro group, cyano group, or a monovalent organic group having 1-20 carbon atoms.

4. The onium salt compound according to claim 3, wherein A in formula (2) is a sulfur atom.

5. The onium salt compound according to claim 3, wherein R^4 in the formula (2) is a group of the following formula (3),



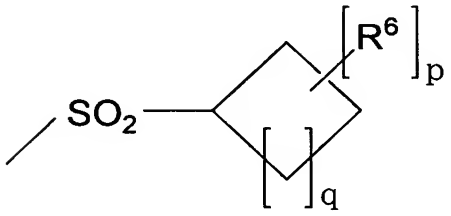
(3)

wherein R^5 represents a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R^{2'})_2$, wherein $R^{2'}$ individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms,

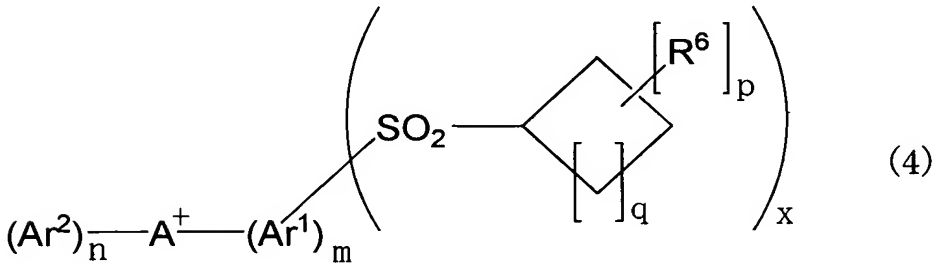
or a substituted or unsubstituted, monovalent heterocyclic group having 3-20 atoms, or two $R^{2'}$ groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms, p is an integer of 0-16, q is an integer of 0-8, and r is an integer of 1-3.

6. An onium salt compound according to claim 5, wherein both p and q are 0 and both r's are 1.

7. The onium salt compound according to claim 1, wherein the group P in the formula (1) is represented by the following formula,



and the cationic moiety is represented by the following formula (4),

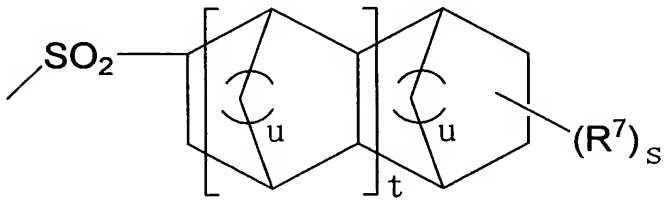


(4)

wherein A, Ar^1, m, Ar^2, n, and x are respectively the same as A, Ar^1, m, Ar^2, n, and x in the formula (1), p and q are respectively the same as p and q in the formula (3), and R^6

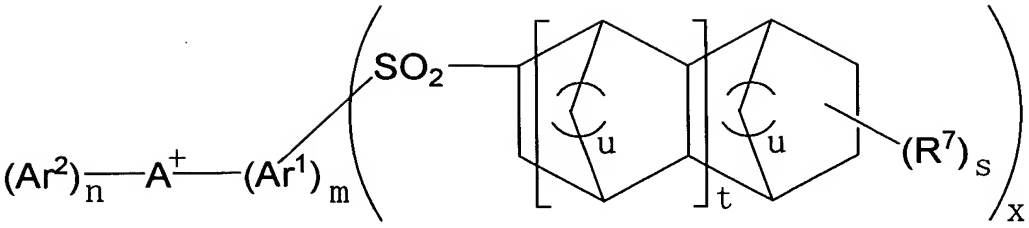
represents a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R^{3'})_2$, wherein $R^{3'}$ individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted, monovalent heterocyclic group having 3-20 atoms, or two $R^{3'}$ groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms.

8. The onium salt compound according to claim 1, wherein the group P in the formula (1) is represented by the following formula,



and the cationic moiety is represented by the following formula

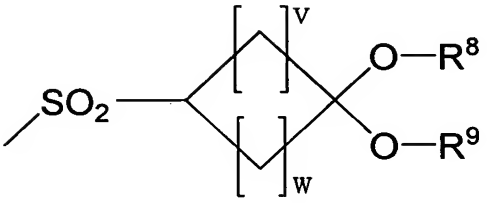
(5),



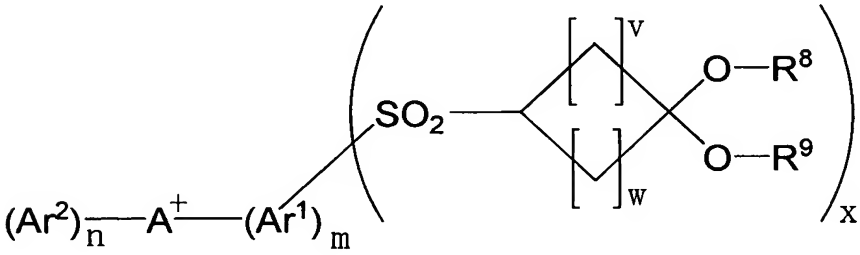
(5)

wherein A, Ar^1, m, Ar^2, n, and x are respectively the same as A, Ar^1, m, Ar^2, n, and x defined in the formula (1), R^7 represents a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R^{4'})_2$, wherein $R^{4'}$ individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted, monovalent heterocyclic group having 3-20 atoms, or two $R^{4'}$ groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms, s is an integer of 0-6, t is an integer of 0-5, and u is an integer of 1-3.

9. The onium salt compound according to claim 1, wherein the group P in the formula (1) is represented by the following formula,



and the cationic moiety is represented by the following formula (6),

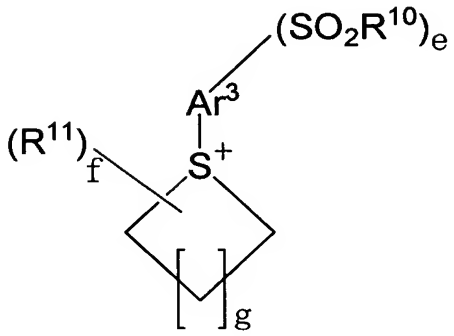


(6)

wherein A, Ar^1, m, Ar^2, n, and x are respectively the same as A, Ar^1, m, Ar^2, n, and x defined in the formula (1), R^8 and R^9 individually represent a substituted or unsubstituted alkyl group having 1-20 carbon atoms or a substituted or unsubstituted monovalent alicyclic group having 3-20 carbon atoms, or R^8 and R^9 may form, in combination and together with one carbon atom and two oxygen atoms in the formula, a group having a cyclic structure with 4-10 atoms; and v and w are respectively the integers of 0-5, satisfying the formula $(v+w) \geq 1$.

10. An onium salt compound having a cation moiety of

the following formula (7),

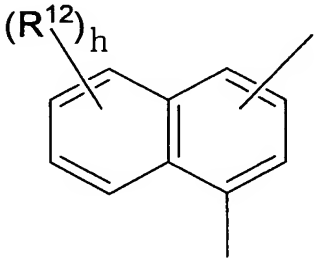


(7)

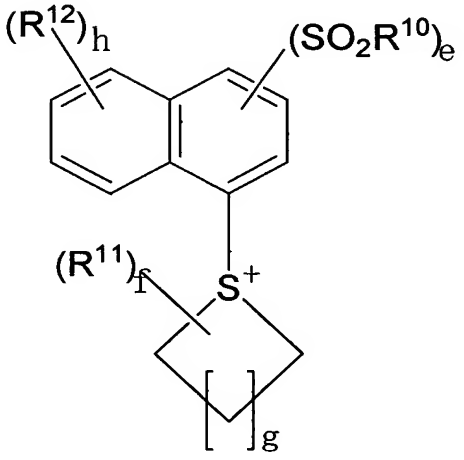
wherein Ar^3 represents a substituted or unsubstituted divalent aromatic hydrocarbon group having 6-20 carbon atoms or a substituted or unsubstituted divalent heterocyclic group having 3-20 atoms, R^{10} and R^{11} individually represent a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R^{5'})_2$, wherein $R^{5'}$ individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted, monovalent heterocyclic group having 3-20 atoms, or two $R^{5'}$ groups form, in combination and together with the

nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms, e is an integer of 1-10, f is an integer of 0-6, and g is an integer of 0-3.

11. The onium salt compound according to claim 10, wherein the group Ar^3 in the formula (7) is represented by the following formula,



and the cationic moiety is represented by the following formula (8),

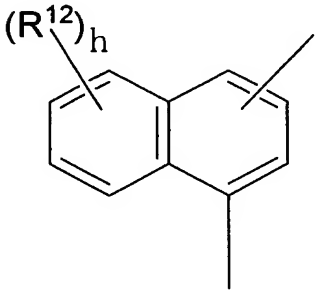


(8)

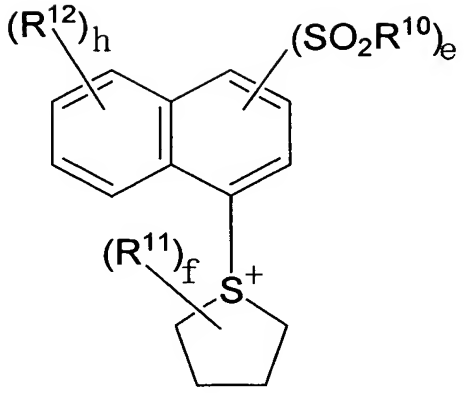
wherein R^{10}, e, R^{11}, f, and g are respectively the same as R^{10}, e, R^{11}, f, and g defined for the above formula (7), R^{12} represents a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic

hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R^{6'})_2$, wherein $R^{6'}$ individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted, monovalent heterocyclic group having 3-20 atoms, or two $R^{6'}$ groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms, and h is an integer of 0-6.

12. The onium salt compound according to claim 10, wherein the group Ar^3 in the formula (7) is represented by the following formula,



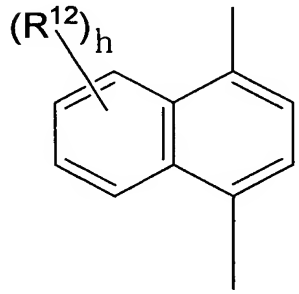
and the cationic moiety is represented by the following formula (9),



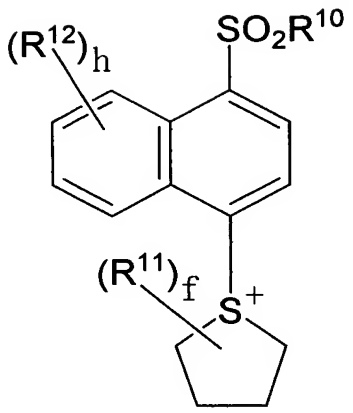
(9)

wherein R^{10}, e, R^{11}, f, R^{12}, and h are the same as R^{10}, e, R^{11}, f, R^{12}, and h defined for the above formula (8).

13. The onium salt compound according to claim 10, wherein the group Ar^3 in the formula (7) is represented by the following formula,



e=1, and the cationic moiety is represented by the following formula (10),



(10)

wherein R^{10}, R^{11}, f, R^{12}, and h are the same respectively as R^{10}, R^{11}, f, R^{12}, and h defined for the above formula (8).

14. A positive tone radiation-sensitive resin composition comprising: (A) at least one photoacid generator selected from the onium salt compounds according to claim 1 as a photoacid generator for photoresist and (B) a resin having an acid-dissociable group and insoluble or scarcely soluble in alkali, but becomes alkali soluble when the acid-dissociable group dissociates.

15. The positive tone radiation-sensitive resin composition according to claim 14, wherein the onium salt compound is selected from the onium salt compounds having $-SO_2R^3$ for the group P in the formula (1).

16. The positive tone radiation-sensitive resin composition according to claim 14, wherein the photoacid generator is selected from the onium salt compound according to claim 3.

17. The positive tone radiation-sensitive resin composition according to claim 14, wherein the photoacid generator is at least one onium salt compound according to claim 5.

18. A positive tone radiation-sensitive resin composition comprising: (A) at least one photoacid generator selected from the onium salt compounds according to claim 10 as a photoacid generator for photoresist and (B) a resin having an acid-dissociable group and insoluble or scarcely soluble in alkali, but becomes alkali soluble when the acid-dissociable group dissociates.